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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/766,727	01/27/2004	Roland Gallay	M101US	3438
24272 7:	590 06/15/2005		EXAMINER	
Gregory J. Koerner			HA, NGUYEN T	
Redwood Patent Law 1291 East Hillsdale Boulevard			ART UNIT	PAPER NUMBER
Suite 205			2831	
Foster City, CA	A 94404		DATE MAILED: 06/15/200:	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/766,727	GALLAY ET AL.			
	Office Action Summary	Examiner	Art Unit			
	·	Nguyen T Ha	2831			
Period fo	The MAILING DATE of this communicati or Reply	on appears on the cover sheet	vith the correspondence address			
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICAT nsions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communicate period for reply specified above is less than thirty (30) day to period for reply is specified above, the maximum statutory are to reply within the set or extended period for reply will, by the period for reply will, by	CFR 1.136(a). In no event, however, may toon.  s, a reply within the statutory minimum of the period will apply and will expire SIX (6) MC y statute, cause the application to become	a reply be timely filed  airty (30) days will be considered timely.  DNTHS from the mailing date of this communication  ABANDONED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed or	n <u>03/21/2005</u> .				
· —	• •	This action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims					
5)□	Claim(s) 1-25 is/are pending in the application of the above claim(s) is/are we claim(s) is/are allowed.  Claim(s) 1-25 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction	ithdrawn from consideration.				
Applicati	on Papers					
10)	The specification is objected to by the Ex The drawing(s) filed on is/are: a) Applicant may not request that any objection Replacement drawing sheet(s) including the The oath or declaration is objected to by	☐ accepted or b)☐ objected to to the drawing(s) be held in abey- correction is required if the drawin	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d)	).		
Priority u	ınder 35 U.S.C. § 119					
12) a)[	Acknowledgment is made of a claim for for All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International Election for	uments have been received.  uments have been received in e priority documents have bee  Bureau (PCT Rule 17.2(a)).	Application No n received in this National Stage			
2) 🔲 Notic 3) 🔲 Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-9- nation Disclosure Statement(s) (PTO-1449 or PTO/ r No(s)/Mail Date	48) Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152)			

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### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments with respect to claims 1-25 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Sakata et al. (US 6,870,725).

Regarding claim 19, Sakata et al. disclose a capacitor comprising a double layer capacitor (20) and housing means (22) for housing the double layer capacitor (figure 5).

4. Claims 18 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi et al. (US 6,433,997).

Regarding claim 18, the method steps of making a battery-sized capacitor are inherent in the structure device as disclosed by Noguchi et al. Noguchi et al. disclose:

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providing a double layer capacitor (1);

- providing a battery sized housing/vessel (2), the housing including an open end (column 2, lines 41-42);
- inserting the double layer capacitor into the open end of the housing (figure 1); and
- sealing the open end of the housing (column 2, lines 41-42).

Regarding claims 21 & 23, Noguchi et al. disclose a battery sized energy storage device/double-layer capacitor (figure 1) comprising:

- a housing (2, column 2, line 39); and
- a rolled electrode (3, column 2, line 39), the rolled electrode including two collectors (11 & 14, column 5, lines 18-19), wherein the two collectors and the housing comprise substantially the same metal (column 2, line 50 and 59-60 and column 3, lines 24-25), wherein the collectors (11 & 14) are coupled to the housing to form an electrical connection (figure 1).

Regarding claim 22, Noguchi et al. disclose the electrical connection providing a polarity independent path for application of energy to the energy storage device (figure 2).

Regarding claim 24, Noguchi et al. disclose the electrical connection being able to receive energy with positive or negative polarity (6 or 7, figure 1).

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (US 6,870,725) in view of Harats et al. (US 5,554,918).

Regarding claim 1, Sakata et al. disclose a capacitor/battery comprising:

- a housing (22);
- a capacitor cell (20), the cell disposed in the housing and electrically coupled to the housing (figure 5).

Sakata et al. fail to teach the housing having dimensions that conform to standardized battery dimensions.

Harats et al. teach a battery having a housing with a size corresponding to a standard cell size (column 4, lines 27-28).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats et al. in Sakata et al. in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

Regarding claims 2-5, **Harats et al. further teach** the housing comprises a standard D-cell sized battery (claim 2), C-cell sized battery (claim 3), AA-cell sized battery (claim 4) and an AAA-cell sized battery (claim 5) form factor (column 4, lines 27-30).

Regarding claim 6, Sakata et al. further disclose the housing comprises one or more connectors/terminals (32), wherein the connectors adapted for connection with an electrical circuit

Regarding claim 7, Sakata et al. discloses the capacitor cell comprises a doublelayer capacitor (figure 1).

Regarding claim 8, Sakata et al. disclose the double-layer capacitor comprising a dry particle based electrode/carbon electrode (column 6, lines 27-28).

Regarding claim 9, the teaching of Harats et al. includes the double-layer capacitor comprises a dry particle based rolled electrode (figure 1).

Regarding claim 10, Sakata et al. disclose the double layer capacitor includes two collectors (13), wherein the collectors are electrically coupled to the housing wherein the two collectors and the housing comprise substantially the same metal.

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Regarding claim 11, the teaching of Harats et al. includes the capacitor comprising a nominal maximum operating voltage of about 4.5V (column 5, lines 11-14, which is within the claimed range).

Regarding claim 12, Sakata et al. disclose the capacitor comprises a capacitance of about 0.1 Farad or above (column 14, lines 36-38).

Regarding claims 13-14, the teaching of Harats et al. includes the capacitor comprises a specific energy density at about 2.5 volts (column 3, lines 59-61, which is within the claimed range).

Regarding claim 15, the teaching of Sakata et al. in view of Harats including all the claimed limitations discussed above with respect to claim 2 above, except for the housing comprising an outer diameter of 33 +0/-1 mm and a height of 61.5=0/-2 mm. It would have been an obvious matter of design choice to have the housing comprise an outer diameter of 33 +0/-1 mm and a height of 61.5=0/-2 mm, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose,* 105 USPQ 237 (CCPA 1955).

Regarding claim 16, Sakata et al., as modified, show all the claimed limitations with respect to claim 1 above. Harats et al. further teach the housing comprises a standardized power tool battery sized form factor (column 4, lines 27-28).

Regarding claim 17, Sakata et al. disclose a double layer capacitor (figure 1) comprising:

a housing (22);

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- a double layer capacitor (20) electrically coupled to the housing within the housing (figure 5).

Sakata et al. fail to teach the housing comprising dimensions that conform to standardized battery dimensions.

Harats et al. teach a battery having a housing of a size corresponding to a standard cell size (column 4, lines 27-35).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats with Sakata et al. capacitor cell in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

Regarding claim 20, Sakata et al. discloses all the claimed limitations discussed above with respect to claim 19, except for the housing means comprises a battery form factor sized housing.

Harats et al. teach a housing means comprising a battery form factor sized housing (column 4, lines 27-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats with Sakata et al. capacitor cell in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi et al. (US 6,433,997) in view of O'phelan et al. (US 6,509,588).

Regarding claim 25, Noguchi et al. disclose all the claimed limitations discussed above with respect to claim 21, except for the electrical connection comprising a laser weld.

O'phelan et al. teach a capacitor having connection members 206 and 306 being laser edge-welded (column 7, lines 36-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the laser weld of O'phelan with Noguchi for welding the connection in order to prevent damage to the connection.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen T. Ha June 13, 2005